



BREAST CANCER IN THE PHILIPPINES: LITERATURE REVIEW

Thesalonica R. Dulanias

RN, MN

“The greatest risk of getting breast cancer tomorrow is being born today in a developing country. The greatest risk of not surviving breast cancer today is being a woman in the Philippines.” – Rosa Francia-Meneses

The statement is quoted from Rosa Francia-Meneses, 1999 World Conference on Breast Cancer, Ottawa. Meneses is the founder of Philippines Breast Cancer Network (PBCN), one of the groups that advocate breast cancer awareness and prevention in the Philippines. This review is not totally intended to support nor dispute the above statement; however, looking into the different sides of this deadly disease in the Philippine context is but just necessary for any health professionals who would like to fulfill the mission of advocating health and illness prevention. The review will revolve around breast cancer incidents, morbidity, and survival rates and potential risks and prevention.

One could not just easily depart from the idea of comparing with the other countries the status quo of the Philippines in terms of dealing with cancer incidents and in preventing the occurrence of such. It may be a shame and quite confusing that despite the advent of advanced medical technologies, breast cancer remains one of the most common malignancy among women worldwide.

Around 140 of 184 countries including the Philippines has an estimated 1.67 million incident cases in 2013 (Kim, Yoo, & Goodman, 2015).

It can be noted that the situation is even worse in the developing countries like Philippines with Age-Standardized Rates (ASR) being 47 per 100,000 women in 2012, a 12% increase compared with the past 10 years (Trieu, Mello-Thoms, & Brennan, 2015). ASR is a summary measure of the rate that a population would have if it had a standard age structure (International Agency for Research on Cancer (IARC), 2012). Standardization is necessary when comparing several populations that differ with respect to age because age has a powerful influence on the risk of cancer.

Similarly Curado et al., 2007 pointed out that with the continuing increase of breast cancer incidence, the greater portions occur in the developing countries of which the Philippines is in the list. According to the Philippine Society of Medical Oncology, 2012, breast cancer is now also the most common cancer among women in most developing countries and Philippines has the highest incidence of breast cancer in Asia; with an estimate of 3/100 Filipinas contract with the disease before 75 and of which 1/100 dies before the age 75 (GMA News Online, 2013).

In 2010, the Department of Health and the Philippine Cancer Society reported that breast cancer comprise 16% of the 80,000 new cancer cases (Tubianosa, 2015).

According to World Health Organization (2015), breast cancer is predicted to continue to increase in less developed countries over the next decade and become the leading cause of cancer-related deaths among women throughout the world. It was estimated that over 508,000 women died in 2011 due to breast cancer (World Health Organization, 2016). Pfizer (2008) presents new analyses of international databases to gain insight into the burden of cancer among Asians. It is important to note that basing on their report, among females, breast cancer is the highest incident cancer in 7 countries – Indonesia, Japan, Malaysia, Philippines, Singapore, Sri Lanka, and Taiwan. From the report, the Philippines has the highest breast cancer mortality rate and the lowest mortality-to-incidence ratio.

Incidence, Mortality and Survival

Kim, Keun-Young, & Goodman (2015) reported that in a worldwide view, the age-standardized mortality rate (ASMR) for breast cancer is 12.9, with an average ASMR for breast cancer in Asia of 10.2. It has highest mortality in western Asia (15.1), followed by south-eastern Asia (14.1), south-central Asia (13.5), and eastern Asia (6.1).

Based on the data of GLOBOCAN, 2002, the Philippines has the highest breast cancer mortality rate (27 per 100,000 population) and lowest survival (0.58 mortality-to-incidence ratio) among the fifteen Asian countries (Pfizer, 2008).

Women in Philippines are facing the highest risk of breast cancer in Southeast Asia that continues to rise by as much as 5 percent annually. Statistics from Philippine Cancer Society in 2005 revealed that 25% of the female population in the country was suffering from breast cancer. Filipino women have a 10% risk of getting the disease and some 6,360 breast cancer patients die each year in the country, making it the leading cause of death (Marzo, Awisan, Bawang, & Stewart, 2015).

Taking their data from WHO Database, Kim et al. (2015) also pointed out that breast cancer mortality increased in southeastern Asian countries, especially among Filipino women who experienced a sharp increase in death rates from 1995 through 2009. The five-year relative survival rate for breast cancer was 58-59% in the Philippines (Tanaka, H. et al., 2009); this means, based on the data, in the year 1993-2002 alone, there were a total of 1,615 cases in the Cancer Registry of Manila and Rizal and from such number, in the span of 5 years, the survival rate is only 58.6 percent. Therefore, one could not generally say that the trend also encompasses that from Visayas and Mindanao due to lack of available data sources at the time of this review; however, with the commonality of risk factors and preventive care throughout the country, the data may speak in behalf of the entire country's status.

Risk Factors

Researches revealed the risk factors for breast cancer which include age, family or personal history, reproductive factors, hormonal treatment, dietary and lifestyle related, alcohol consumption, obesity, exposure to ionizing radiation, and genetic predisposition (Peto, (2001); Danaei, Hoorn, Lopez, Murray, & Ezzati (2005); IARC, 2008; Lacey et al., 2009; Colditz & Bohlke, 2014).

The chances of breast cancer increase, as one gets older. Laudico et al. (2010) mentioned that the breast cancer incidence rate starts rising steeply at age 30. It is also considerable to take a look at the data related to breast cancer incidence and its distinctive age-specific curve as presented by Parkin, Whelan, Ferlay, Teppo, & Thomas, 2002. The data showed that breast cancer has an ASR of 54.2 per 100,000 women.

The risk of breast cancer is higher among women who have relatives with the disease. Having a close relative with the disease (sister, mother, daughter) doubles a woman's risk. Having 2 first-degree relatives increases her risk about 3-fold (American Cancer Society, 2016).

Reproductive factors associated with prolonged exposure to endogenous estrogens, such as early menarche, late menopause, late age at first childbirth are among the most important risk factors for breast cancer (IARC, 2008; Lacey et al., 2009).

Similarly, the American Cancer Society, 2016 states that women who have had no children or who had their first child after age 30 have a slightly higher breast cancer risk overall. Having many pregnancies and becoming pregnant at a young age reduce breast cancer risk overall.

The studies conducted at China, Taiwan, Singapore, Japan, and South Korea suggest that women who are unmarried, nulliparous or with a reduced number of full-term pregnancies, older at first full-term pregnancy, have not breastfed, or who had an early menarche or late menopause, are at increased risk for postmenopausal breast cancer (Tamakoshi et al., 2005; Huang et al., 2011; Sugawara et al., 2013). The same findings are generated in the Philippine-based study with smaller case-controlled variables as cited by Kim et al. (2015).

Although it is claimed by many researchers that the use of oral contraceptive pills and hormone replacement therapy (HRT) is a risk factor for breast cancer in Asian women (Chlebowski et al., 2013), data with Filipino respondents is not yet available at the time of this review to the best knowledge of the researcher. However, the Philippine Society of Medical Oncology (2015) also posted that use of oral contraceptives in the last 10 years increases the risk of breast cancer. Hence, the idea of Kim et al. (2015) is agreeable that the countries like Philippines have limited resources and research funding, ecologic, and cross-sectional studies

may assist with risk stratification.

Obesity is an established risk factor for postmenopausal breast cancer among Asian women in eastern Asia and in some countries in southeastern Asia. Similar studies also posited that changes in dietary habits to a more western style (i.e., higher intake of calorie, fat, animal protein) correlate with an increased breast cancer incidence among women residing in Asian countries (Kim et al., 2015).
Treatment and the Early Detection Issues

There is huge disparity of survival rates among women with breast cancer in the Philippines and with that of the developed countries that can be attributed to earlier detection and appropriate adjuvant treatment of early breast cancer. Taking the view of Kim et al. (2015), breast cancer stage at diagnosis reflects access to and sophistication of medical care, cancer screening, as well as tumor aggressiveness. With the lack of screening facilities in the country, early detection is indeed a problem.

As emphasized by the World Health Organization (2006), screening for early disease for early detection followed by immediate appropriate and adequate treatment are ways to get protected from breast cancer. The term screening refers to the regular use of certain examinations or tests in persons who do not have any symptoms of a cancer but are at high risk for that cancer (e.g., family history of breast, ovary, and/or colon cancer). With this being said, it must be also realized that in the Philippine context, early detection is not usually the case. Only few women are aware and conscious about being regularly screened. Plus, in reality also, breast cancer are realized in advanced stages since its symptoms are manifested late. In the observations and findings of Steligo (2013), because Asian women in the U.S. have mammograms less frequently than any other ethnic groups, their tumors are more advanced when found, when treatment options are fewer and survival is less likely. This is about Filipinos in the US; how about the Filipinos in the Philippines?

The World Health Organization (2016) promotes breast cancer control through comprehensive national cancer control programs webbed into non-communicable diseases and other related problems. The comprehensive cancer control measures are prevention, early detection, diagnosis and treatment, rehabilitation and palliative care. The organization also added, "raising general public awareness on the breast cancer problem and the mechanisms to control as well as advocating for appropriate policies and programs are key strategies of population-based breast cancer control". Needless to say, awareness is the weapon against breast cancer increasing morbidity rates in the country.

In the Philippines, what is the level of awareness on breast cancer? In the website of Philippine Council for Health and Research Development (2008), this is posted: "Awareness about breast cancer remains low in the Philippines. Many Filipino women seek medical consultation only when the disease is already in its advanced stages," laments Alan Knox, president of leading multinational research-based pharmaceutical company AstraZeneca. Congressman Manny Pacquiao is indeed commendable with his submission of the House Bill No. 61, An Act Providing for an Establishment of Breast Care Centers in every region nationwide. In the explanatory note of the House Bill, the centers aim to spearhead information campaign about breast cancer in the Philippines and to provide affordable services and cure of the disease. Was this ever implemented? As to the best knowledge of the researcher, data about its implementation is not yet available.

Of course, there are also other concerned groups and organizations that are worthy of appreciation in helping the Filipinos to become aware of breast cancer. To mention a few, the Philippine Cancer Society, Philippines Breast Cancer Network, the group of surgeons, public and private hospitals in the entire country as well as the colleges and universities are involved in educating the people regarding breast cancer.

In terms of prevention, WHO advocates that there must be a control of specific modifiable breast cancer risk factors as well as effective integrated prevention of non-communicable diseases, which promotes healthy diet, physical activity, and control of alcohol intake, overweight and obesity. For Dr. Felycette GayLapuz of the Philippine Society of Medical Oncology (2015), prevention starts with awareness. "One in three cancer deaths could be prevented by modifying or avoiding key risk factors. Eat less meat, more fruits and veggies. Don't smoke. Exercise regularly. Maintain optimal weight."

Early Detection Methods for Breast Cancer

Early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control (Anderson et al., 2008). Indeed, as mentioned earlier in this paper, early detection is one of the best practices to combat mortality due to breast cancer. If this is the case, how are screening methods affecting the mortality rates among breast cancer patients in the Philippines? Early detection methods are described by WHO (2006) as: early diagnosis or awareness of early signs and symptoms in symptomatic populations in order to facilitate diagnosis and early treatment, and screening that is the systematic application of a screening test in a presumably asymptomatic population. It aims to identify individuals with an abnormality suggestive of cancer.

The following are the screening methods available in the Philippines:

Mammography. WHO (2016) mentioned the evidence that organized population-based mammography screening programmes can reduce breast cancer mortality by around 20% in the screened group versus the unscreened group across all age groups. Though mammogram is already available in this country, in his study among Filipinos, Ko, Sadler, Ryujin, & Dong (2003) identified "lack of time" as the greatest barrier to obtaining a screening mammogram. Adding to this reason are the unpleasant experiences with mammography such as pain and discomfort, cultural beliefs about breast health such as not wanting to talk about breast and finally, difficulties in accessing services (Wu & Bancroft, 2006).

One of the issues about mammogram in the entire country is the fact that some public hospitals do not offer this for free and many could not afford the fee. As to whether or not mammogram can deter the mortality rate due to breast cancer, Meneses (2015) argued that its way of detection is still late. Similar findings are pointed out with the study of Maxwell, Bastani, & Warda (1997) and Ko et al. (2003) among Filipinos abroad. They cited barriers on mammography screening such concern over cost, inconvenience of time and of getting to the mammography facility, denial that mammography is needed in the absence of symptoms, and embarrassment.

Breast Self-examination (BSE). In raising awareness and full responsibility for one's health, BSE is recommended as one of the screening methods. According to the Philippine Cancer Society (2014), women are encouraged to perform a BSE every month (for premenopausal women 5-7 days after a menstrual period; postmenopausal women can do this every end of the month), because with regular examination they have a greater chance of finding a lump early in its development. BSE must be started at age 25 years. Most health practitioners for women's health make use of BSE as one of the fundamental screening procedures even if the patient does not request for such.

Moreover, still from the information of the Philippine Cancer Society, "upon positive BSE, a second opinion CBE follows; a positive CBE calls for core needle biopsy for definitive diagnosis". The negative/equivocal result BSE/CBE in a high suspect case of breast cancer demands a mammogram and a wire-loop-guided biopsy as needed. Usually an ultrasound of the breast is requested to ascertain cystic nature of the mass. Digital mammography is not painful as is the older mammography machines. Mammography has to go together with BSE and CBE. The process is available in the Philippines but with the economic situation, only few can avail.

Addressing Breast Cancer

Kim et al (2015) posited: "it is likely that morbidity and mortality from breast cancer in Asia will continue to grow, and demand for the implementation of population-based, community programs for breast cancer prevention will expand. Increasing breast cancer awareness through health education, increasing the availability of clinical breast examination and the identification of high-risk women may be cost-effective strategies for secondary prevention in less developed regions and countries". Clearly, the Philippines should consider

The Department of Health (2011) is embarking on programs that will provide health care access to cancer patients through the "Medicine Access Program" for ALL and breast cancer patients in the country. The Breast Cancer Medicine Access Program (BCMAP) aims to improve access to medicines for Breast Cancer for indigent beneficiaries. The program targets the most cost-effective and commonly used adjuvant therapy for Stage I-IIIc breast cancer in women. The program not only provides free medicines but also encourages early screening and cancer awareness among Filipino as it focuses on managing the early stage of the disease to improve survival rates of patients. In addition, the October 25, 2011 press release of the Department of Health, it is announced that more than 100 Filipino women with financial difficulties are provided with free medicines for their full chemotherapy regimen.

As claimed my medical gurus, central to the success of mitigating mortality rate due to breast cancer is early detection. This then calls for careful planning to come up with sustainable health programs targeting the right population group with potential risks of cancer and that coordination, continuity and quality of actions across in the continuum of care must be ensured. It is ideal to target "younger women would lead to more evaluation of benign tumors, which causes unnecessary overload of health care facilities due to the use of additional diagnostic resources" (Yip et al., 2008).

For Ho, Muraoka, Cuaserna, Guerrero, & Agbayani (2010) – it is necessary to have broad based but targeted breast cancer awareness effort to be directed to Filipino women, which included "involving the media, the training of key community leaders, and the development of partnerships with health organizations with a like mission". Filipino men and women are more likely to die of breast cancer. When the available literatures are analyzed, it is evident that breast cancer is diagnosed at more advanced stage and Filipinos have low rates of compliance to mammography guidelines, and even lack of awareness about the deadly illness, of which factors may contribute to their high mortality rate. Hence, the Philippine government must look into the practices of other nations in effectively combating the breast cancer dilemma; otherwise, the trend remains and will continue to increase.

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